

Abstract of the Disclosure

A rotorcraft and method for providing controlled flight which provides flight in all six degrees of freedom of pitch, roll, yaw, up/down, forward/rear, and left/right. The rotorcraft includes a fuselage with a pair of counter-rotating rotor blade assemblies each having a plurality of radially-
5 extending airfoil shaped blades about a vertically disposed central axis. A rotor drive system mounted to the fuselage includes a motor or engine for rotationally driving the rotor blade assemblies. A rotor blade control system monitors the rotational location of each blade relative to the fuselage and allows a pilot to control respective vertical and horizontal thrust components of the blades corresponding to lift versus drag characteristics of the airfoils during rotation about the
10 fuselage. This is done by changing the pitch angles of the blades and/or by utilizing respective flaps pivotally mounted to the blades to change the effective pitch angle of the blades.